ENGLISH TRANSLATION OF AMENDMENT UNDER ARTICLE 34 PCT/JP2005/1210 TOYOTA BOSHOKU KABUSHIKI KAISHA et al.

Claims

- 1. (Amended) A headrest controller for moving part or whole of a headrest of a vehicle seat toward a head of a passenger to reduce a distance between the headrest and the head in the horizontal direction by predicting or detecting a crash to a rear of the vehicle, characterized by including:
- a head position detecting unit for detecting a predetermined state of approach or state of contact of the headrest to or with the head during a movement of a headrest; and

a control circuit for stopping the headrest based on a detection signal from the head position detecting unit;

wherein the head position detecting unit includes a sensor for detecting the predetermined state of approach and a sensor for detecting the predetermined state of contact and the control circuit stops the headrest based on a detection signal from either of the sensors which has output a detection signal earlier in time.

- 2. (Canceled)
- 3. (Canceled)

- 4. (Canceled)
- 5. (Amended) A headrest controller as in claim 3, characterized in that the head position detecting unit has a plurality of sensors of at least either sensor type among sensor type for detecting the predetermined state of approach and sensor type for detecting the state of contact.
 - 6. (Canceled)
- .7. A headrest controller as in claim 5, characterized in that the head position detecting unit is provided in the front part of the headrest.
 - 8. (Amended) A headrest controller comprising:
- a crash detecting sensor for predicting or detecting a crash to a rear of a vehicle;
- a headrest driving mechanism for moving part or whole of a headrest of a vehicle seat toward a head of a passenger to reduce a distance between the headrest and the head in the horizontal direction;
- a head position detecting unit for detecting that the headrest has entered a predetermined state of approach or state of contact to or with the head; and
- a control circuit for operating the headrest driving mechanism when the crash detecting sensor outputs a detection signal and stopping the headrest driving mechanism when the head position detecting unit outputs a detection signal;

characterized in that:

the head position detecting unit includes a sensor for detecting the predetermined state of approach and a sensor for detecting the state of contact; and

the control circuit stops the headrest when the predetermined state of approach or state of contact is detected by either of the sensors.

- 9. (Canceled)
- 10. (Canceled)

 ${\tt 11.}$ A headrest controller as in claim 8, characterized in that:

the crash detection sensor is a sensor for predicting a crash to the rear of the vehicle; and

the control circuit is configured to return the headrest to an initial position by operating the headrest driving mechanism in the opposite direction when a predetermined time passes after the crash detecting sensor outputs a detection signal.

12. (Canceled)

13. (Canceled)